



CERTIFICATE

This is to certify that **Swami Vivekanand Subharti University**, Subhartipuram, NH-58, Delhi-Haridwar Bypass Road, Meerut-250005 Uttar Pradesh has conducted the detailed '**Green Audit**' for their campus on dated **15.10.2020** to assess the environmental impact on institutional working framework. The Green initiatives carried out by the university have been verified on the report submitted and was found to be satisfactory. The efforts taken by management and faculty towards environment and sustainability are highly appreciated and commendable.


Puneet Kaushik
For EHS Alliance Services

EHS Alliance Services

Plot No A-72, Surya Vihar, Near Sector-4, Gurugram (Haryana)-122001
Phone-0124-2250624, Email: ehsalliance@gmail.com, www.eshall.in

GREEN AUDIT REPORT



Swami Vivekanand Subharti University

NH-58, Delhi-Haridwar Bypass Road, Meerut (UP), PIN-250005



EHS Alliance Services

Plot No A 72 Surya Vihar, Gurugram (Haryana) India, Pin Code 122001
e mail: ehsalliance@gmail.com, web link: www.ehsall.in

CONTENTS

ACKNOWLEDGEMENT	4
DISCLAIMER	5
CONTEXT	6
INTRODUCTION	8
OVERVIEW OF INSTITUTE	10
AUDIT OBJECTIVES & SCOPE	14
AUDIT PARTICIPANTS	15
EXECUTIVE SUMMARY	17
AREA OF IMPROVEMENTS	17
ENVIRONMENTAL AUDIT - QUESTIONARE	18
<i>WASTE MINIMIZATION AND RECYCLING</i>	20
<i>GREENING</i>	21
<i>ENERGY CONSERVATION</i>	22
<i>WATER CONSERVATION</i>	23
<i>CLEAN AIR</i>	25
<i>ANIMAL WELFARE</i>	26
<i>ENVIRONMENTAL LEGISLATIVE</i>	27
<i>GENERAL PRACTICES</i>	28
BEST PRACTICES FOR ENVIRONMENT	29
RECOMENDATION	31
CONCLUSION	32
REFERENCE	33
ANNEXURE – PHOTOGRAPHS OF ENVIRONMENT CONSIIOUSNESS	34

ACKNOWLEDGEMENT

EHS Alliance Services Green Audit Team thanks the management of **Swami Vivekanand Subharti University (SVSU)** for assigning this important work of Green Audit. We appreciate the co-operation to our team for completion of study.

Our special thanks are due to:

- Dr. Vijendra Pal Singh Vice-Chancellor of Swami Vivekanand Subharti University
- Syed Zafar Hussain Additional Registrar of the university
- Green Audit Co-ordinator –Dr. Mukesh Ruhela - HOD Environmental Engineering

For giving us necessary inputs to carry out this very vital exercise of Green Audit. We are also thankful to other staff members who were actively involved while collecting the data and conducting field measurements.

DISCLAIMER

EHS Alliance Services Green Audit Team has prepared this report for **Swami Vivekanand Subharti University (SVSU)** based on input data submitted by the representatives of university complemented with the best judgment capacity of the expert team.

While all reasonable care has been taken in its preparation, details contained in this report have been compiled in good faith based on information gathered.

It is further informed that the conclusions are arrived following best estimates and no representation, warranty or undertaking, express or implied is made and no responsibility is accepted by Audit Team in this report or for any direct or consequential loss arising from any use of the information, statements or forecasts in the report.

If you wish to distribute copies of this report external to your organisation, then all pages must be included.

EHS Alliance, its staff and agents shall keep confidential all information relating to your organisation and shall not disclose any such information to any third party, except that in the public domain or required by law or relevant accreditation bodies. EHS Alliance staff, representatives and accreditation bodies have signed individual confidentiality undertakings and will only receive confidential information on a 'need to know' basis.



Report by: Puneet Kaushik (Lead Auditor)

CONTEXT

The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory from the academic year 2016–17 onwards that all Higher Educational Institutions should submit an annual Green Audit Report. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through Carbon Footprint reduction measures.

In view of the NAAC circular regarding Green Auditing, the University Management decided to conduct an external Green Evaluation by a competent Green Auditor along with a Green Audit Assessment Team headed by Dr. Mukesh Ruhela, HOD Environmental Engineering, Swami Vivekanand Subharti University (SVSU).

Green Audit focuses on the Green Campus, Waste Management, Water Management, Air Pollution, Energy Management & Carbon Footprint etc. being implemented by the College Management. The concept, structure, objectives, methodology, tools of analysis, objectives of the audit are mentioned below in the report.

CONCEPT

The term 'Environmental audit' or 'Green audit' means differently to different people. Terms like 'assessment', 'survey' and 'review' are also used to describe similar activities. Furthermore, some organizations believe that an 'environmental audit' addresses only environmental matters, whereas others use the term to mean an audit of health, safety and environment-related matters. Although there is no universal definition of Green Audit, many leading companies/institutions follow the basic philosophy and approach summarized by the broad definition adopted by the International Chambers of Commerce (ICC) in its publication of Environmental Auditing (1989).

The ICC defines Environmental Auditing as:

"A management tool comprising a systematic, documented, periodic and objective evaluation of how well environmental organization, management and equipment are performing with the aim of safeguarding the environment and natural resources in its operations/projects."

The European Commission, in its proposed regulation on environmental auditing, has also adopted the ICC definition of Environmental Audit. However, the outcome of Green Audit should be established with concrete evidence that the measures undertaken and facilities in the institution under green auditing.

INTRODUCTION

A Nation's growth starts from its educational institutions, where the ecology is thought as a prime factor of development associated with environment. Educational institutions now a day are becoming more sensitive to environmental factors and more concepts are being introduced to make them eco-friendly. To preserve the environment within the campus, various viewpoints are applied by the several educational institutes to solve their environmental problems such as promotion of the energy savings, recycle of waste, water reduction, water harvesting etc. The activities pursued by colleges can also create a variety of adverse environmental impacts.

Green auditing is a process whereby an organization's environmental performance is tested against its environmental policies and objectives. Green audit is defined as an official examination of the effects a college has on the environment. As a part of such practice, internal environmental audit (Green Audit) is conducted to evaluate the actual scenario at the campus.

Green audit can be a useful tool for a college to determine how and where they are using the most energy or water or resources; the college can then consider how to implement changes and make savings. It can also be used to determine the type and volume of waste, which can be used for a recycling project or to improve waste minimization plan. Green auditing and the implementation of mitigation measures is a win-win situation for all the college, the learners and the planet. It can also create health consciousness and promote environmental awareness, values and ethics. It provides staff and students better understanding of Green impact on campus.

Green auditing promote financial savings through reduction of resource use. It gives an opportunity for the development of ownership, personal and social responsibility for the students and teachers. Thus it is imperative that the college evaluate its own contributions toward a sustainable future. As environmental sustainability is becoming an increasingly important issue for the nation, the role of higher educational institutions in relation to environmental sustainability is more prevalent.

A clean and healthy environment aids effective learning and provides a conducive learning environment. There are various efforts around the world to address environmental education issues.



Environmental Management Systems (EMS) is very popular in the industrial sector, but the general belief is that EMS is something pertaining to industries only. Other parts of the world have started adopting compatible environmental management systems either voluntarily or for promoting standards by external certification. International environmental standards do not suit the existing Indian educational system. Hence EHS Alliance has developed a compatible system by developing locally-applicable techniques.

A very simple indigenized system has been devised to monitor the environmental performance of educational institutions. It comes with a series of questions to be answered on a regular basis. Environmental conditions may be monitored from angles that are relevant to Indian requirements, without stress on legal issues or compliance.

This innovative scheme is user-friendly and totally voluntary. The environmental monitoring system helps the institution to set environmental examples for the community and to educate young learners. It can be adapted to urban and / or rural situations.



OVERVIEW OF INSTITUTE

Swami Vivekanand Subharti University (SVSU) is a University under section 2(f) of the University Grant Commission (U.G.C.) Act, 1956 set up under the Swami Vivekanand Subharti Vishwavidyalaya, Uttar Pradesh Adhiniyam, 2008 (U.P. Act No.29 of 2008) as passed by Uttar Pradesh Legislature and assented by the Hon'ble Governor of Uttar Pradesh in September 2008.

The University has been established under the aegis of Mahayana Theravada Vajrayana Buddhist Religious and Charitable Trust, Meerut, which has acquired a commendable record of service in the field of Education, Health Care and Social Welfare.

The main campus of the University is in the National Capital Region, strategically situated on National Highway 58, Delhi bypass road, Meerut, The campus aptly called 'Subhartipuram', is spread over a sprawling area of about 250 acres of land comprising magnificent buildings, lush green lawns and vibrant surroundings with over 7000 people, dedicated to make the University a Magnum Opus in the World.



The University has several constituent colleges which provide higher education in mostly all the disciplines like Medical, Dental, Nursing, Physiotherapy, Paramedical, Pharmacy, Naturopathy, Yogic Sciences, Engineering, Management, Law, Journalism, Education, Library, Arts and Science, Hotel Management, Faculty of Science etc. is engaged by design to create academically and technically proficient professionals.

The University éclat of highly qualified, dedicated and competent faculty from all walks of life, world class infrastructure, well equipped laboratories with latest state-of-the-art equipment and a vast library with recent knowledge resources including e-resources.

The unparalleled uniqueness of Subharti University lies in providing an environment fully conducive to the holistic development of students. Thus, maintaining a balance between academic excellence and moral perfection. The University has also started a number of courses through Distance Education, approved by joint committee of UGC, AICTE, and DEC. The University has been awarded the membership of Association of Indian Universities in 2013 and accorded grade 'A' by NAAC in 2016.



"All India Conference of Intellectuals and School of Educators" have conferred "Outstanding University of the Year 2013-2014" to The University for its outstanding contribution in the fields of education, science, healthcare, national integration, social empowerment and preservation of cultural heritage. The University has also started a number of courses through Distance Education, approved by the Distance Education Bureau of UGC.

CONSTITUENT COLLEGES/ INSTITUTIONS/ FACULTY/ DEPARTMENTS OF THE UNIVERSITY

Subharti Medical College

Subharti Dental College

Panna Dhai Maa Subharti Nursing College

Jyotirao Phule Subharti College of Physiotherapy

Kharvel Subharti College of Pharmacy

Subharti Institute of Technology & Engineering

S.Sastri Satyamurti Subharti Polytechnic College

Sardar Patel Subharti Institute of Law

Ganesh Shankar Vidyarthi Subharti College of Journalism & Mass Communication

Nandlal Bose Subharti College of Fine Arts & Fashion Design

Acharya Vishnu Gupt Subharti College of Management & Commerce

Bhikaji Cama Subharti College of Hotel Management

Maharishi Aurobindo Subharti College & Hospital of Naturopathy & Yogic Sciences

Faculty of Education

Faculty of Arts & Social Science

Keral Verma Subharti College of Science

Samrat Ashok Subharti School of Buddhist Studies



VISION & MISSION of UNIVERSITY

SUBHARTI IS A MISSION OF SERVICE It is committed to provide basic necessities of life such as healthcare and education to everyone without any bar of caste, creed, religion or any other man made factors, by establishing schools, colleges, hospitals, ashrams and Service Centers.

SUBHARTI IS AN EXEMPLAR OF LOVE OF LOVE AND SACRIFICE. It aims to bring people together by removing hatred, spreading love, building up of moral & national character and extending service to mankind so as to make the dream of ~VASUDHAIV KUTUMABKAM come true. Social reformation by the formation of casteless society, removal of communalism terrorism is its major objectives. SUBHARTI IS AN EXPRESSION OF GRATITUDE to those who sacrificed their lives for the cause of humanity, equality and independence of our country, thus committing itself to NATIONAL INTEGRATION AND AWAKENING. That is why this University has been named after one of the most illustrious sons of India- Swami Vivekanand.

SUBHARTI IS AN ASPIRATION OF MATERIALIZING:

सर्वे भवन्तु सुखिनः सर्वे सन्तु नियमयाः ।
सर्वे भद्राणिः पश्यन्तु माकश्चिद् दुःख भ्राम्भवेत् ॥

(May All become Happy, May All become free from Illness. May All see what is Auspicious, Let no one Suffer.)



OBJECTIVES

The purpose and focus of the audit was mainly to review all environmental aspects in university which included following:

1. Review of all environment related applicable legal requirements and other requirements to which organization subscribes. These include regulatory compliance documents like statutory permissions / NOCs from statutory authorities, Pollution control board related norms, Emergency Preparedness Plan, and Spill Prevention Plan etc.
2. All environmental monitoring reports pertaining to air pollution, water pollution, noise pollution and status of results against applicable standards.
3. Examination of existing environmental management practices and procedures, including those associated with procurement and contracting activities.
4. Monitoring and review of all preventive maintenance of equipments connected with direct or indirect pollution.
5. Chemical management like storage, handling and use of chemicals, special arrangement for flammable chemical, and consumption tracking etc.
6. Waste management at site that includes storage and disposal, use of PPEs, hygiene conditions, any means of recycling through vendors. Hazardous waste and e-waste management and disposal in compliance with applicable norms.
7. Review of all critical areas and production processes in premise that has connection with environmental aspects and impacts.
8. Review of all the systems and processes in relation with environment that is part of environmental management system.
9. Review of environmental aspects including those associated with normal operating conditions, abnormal conditions including start-up and shut down, and emergency situations and accidents.
10. Review of overall environmental performance and practices of contractors and suppliers.
11. Review of extraction and distribution of raw material and natural resources. Distribution will include use and end life of product.
12. Evaluation of organization performance against the management objectives and targets in relation with environment.
13. Analyzing the awareness level in premise for environmental policy and objectives which includes competency, awareness and understanding of roles and responsibility.

14. Operational control of all those operations that are associated with its identified environmental aspects and to check that control is effective in reducing the adverse impact associated with them.
15. Evaluation of previous emergency situations and accidents and review of emergency preparedness and response plan.

The broad aims/benefits of the eco-auditing system would be

- Environmental education through systematic environmental management approach
- Improving environmental standards
- Benchmarking for environmental protection initiatives
- Reduction in natural resource use and Economic savings through a reduction in resource use
- Curriculum enrichment through practical experience
- Development of ownership, personal and social responsibility for the university campus and its environment
- Enhancement of university profile towards Green thinking and sustainability
- Developing an environmental ethic and value systems in young people

To accomplish these objectives, we analyzed resource use and the campuses environmental impact through a series of environmental or sustainability lenses. It is hoped that the results presented in this audit will serve as a guide for educating people on the current practices and resource use at Campus as well as spawn innovation and new initiatives.

AUDIT PARTICIPANTS

On behalf of University:

Name	Position/Department
Dr. Vijendra Pal Singh	Vice-Chancellor, Swami Vivekanand Subharti University
Mr. Deepesh Kr. Saxena	Registrar, Swami Vivekanand Subharti University
Syed Zafar Hussain	Additional Registrar, Swami Vivekanand Subharti University
Dr. Mukesh Ruhela	HOD – Department of Environmental Engineering
Mr. Harshvardhan Kaushik	Administration
Mr. Aman Sherwani	Mass Media
Mr. AC Pathak	Horticulture

Audit was conducted on behalf of EHS Alliance Services:

Name	Position	Qualification
Puneet Kaushik	Lead Auditor	M.Sc. Environmental Science & M.Tech (Environment Science & Engineering), PGDELP, PGDISM, Lead Auditor ISO 14001:2015, OHSAS 18001:2007
Dr Uday Pratap	Co- Auditor	PhD in Telecommunication, Masters in Computer Science, Energy Auditor, Life Cycle Assessment, PGC – Climate Change

EXECUTIVE SUMMARY

An environmental audit is a snapshot in time, in which one assesses campus performance in complying with applicable environmental laws and regulations. Though a helpful benchmark, the audit almost immediately becomes outdated unless there is some mechanism in place to continue the effort of monitoring environmental compliance.

SVSU already done internal green assessment and annual reports published for continual improvements; QS Programme and doing their bid towards environmental protection and environmental awareness at local and global front. Audit criterion is environmental cognizance, waste minimization and management, biodiversity conservation, water conservation, energy conservation and environmental legislative compliance by the campus. A questionnaire is used during audit. This audit report contains observations and recommendations for improvement of environmental consciousness.

AREA OF IMPROVEMENTS

- Environment Policy to be adopted by the University Campus.
- Water Meter should be installed and maintain the inventory of water resource
- Storage of chemicals like; paints, gums resins, oils, lubricants, acids etc. in designated place and safety/warning signs should be displayed.
- Internal inspection system should be developed for various equipments available in campus.
- Waste Management plan should be prepared for the campus.
- Environmental drills for response against spillage and leakage of chemicals in the campus
- The monthly inventory of e-waste is required to be maintained in formats on regular basis.

ENVIRONMENTAL AUDIT -QUESTIONARE

The areas of eco/environmental/green auditing to be followed/practiced by participating institutions:

- i. Waste Minimization and Recycling
- ii. Greening
- iii. Energy Conservation
- iv. Water Conservation
- v. Clean Air
- vi. Animal Welfare
- vii. Environmental Legislative
- viii. General Practices

Dose any Environmental Audit conducted earlier?

The campus has conducted the internal Green assessment under the Green Committee of SVSU. The Annual reports records reviewed during the audit, Main focus of this is to bring awareness of environmental values in students and society. Now, the external audit for environmental aspects and impacts under Green Audit is awarded to EHS Alliance Services for a more systematic way of monitoring the environmental eminence initiative, taken by university for environment protection.

What is the total permanent population of the Institute?

	Male	Female	Total
Students	2929	3446	6375
Teachers	593	367	960
Non Teaching Staff	1665	781	2446
Sub Total	5187	4594	9781
Approximate Number of Visitors (Per day)			70
What is the total number of working days of your campus in a year?			180 for academics session and 246 for administration

Where is the campus located?

The campus is Located in Subhartipuram, NH-58, Delhi-Haridwar Bypass Road, Meerut (U P), India, and Pin Code-250005.

Which of the following are available in your institute?

1 Garden area	Available
2 Play ground	Available
3 Kitchen	Available
4 Toilets	Available
5 Garbage Or Waste Store Yard	Available
6 Laboratory	Available
7 Canteen	Available
8 Hostel Facility (numbers)	Yes
9 Guest House	Available

Which of the following are found near your institute?

1 Municipal dump yard	Not in vicinity of institute
2 Garbage heap	No Garbage heaps
3 Public convenience	Yes , public convenience is available
4 Sewer line	4 km sewer line within campus
5 Stagnant water	No stagnant water
6 Open drainage	No, all covered and underground
7 Industry - (Mention the type)	No
8 Bus / Railway station	Within 5 KM radius of campus
9 Market / Shopping complex / Public halls	Yes

I - WASTE MINIMIZATION AND RECYCLING

1.	Does your institute/campus generate any waste? If so, what are they?	Yes, Solid waste, Canteen waste, paper and plastic, Horticulture Waste, Bio-medical waste, e-waste etc.			
2.	What is the approximate amount of waste generated per day? (in Kilograms/month) (approx.)	Bio Degradable	Non-Biodegradable	Hazardous	others
3. How is the waste generated in the institute managed? By 1 Composting 2 Recycling 3 Reusing 4 Others (specify)		Reuse of one side printed Paper for internal communication. Sewage water is treated in-house STP and water is reused in campus for various purpose. Domestic Waste is given to Municipal Corporation. Two types of Waste bins are provided at campus for biodegradable and non biodegradable waste. Horticulture waste is also given to Municipal Corporation. Vermicomposting is initiated by campus for organic compost.			
4.	Do you use recycled paper in institute/campus?	Yes			
5.	Do you use reused paper in institute/campus?	Yes			
6.	How would you spread the message of recycling to others in the community? Have you taken any initiatives? If yes, please specify.	Yes, Green Committee carried out numerous activities. Recycling campaigns, e waste management, Anti-plastic campaigns, Varsha Vriksharopan, sustainable goal awareness programme, Zero Car Day, World Environment Day, etc			
7.	Can you achieve zero garbage in your institute? If yes, how?	Not yet achieved. Possible through waste management plan.			

II – GREENING THE CAMPUS

8.	Is there a garden in your institute?	Yes, about 430734.09 Sq. Meter areas are developed as Gardens.	
9.	Do students spend time in the garden?	2-4 Hours during winters	
10.	Total number of Plants in Campus	Plant type	Approx. number
		Trees	11995
		Shrubs	5457
		Grass Cover	12.46 Acre
11.	Suggest plants for your campus. (Trees, vegetables, herbs, etc.)	Ashoka, Ficus Religeosa, Boganvella, Alovera, Eucalyptus, Azadirachta and many more as per geographical regime. Medicinal Plants nursery also maintained by Pharmacy Department in the premises.	
12.	Is the university campus have any Horticulture Department	Yes	
	Number of Staff working in Horticulture Department	Tree Gardeners, One Horticulture Manager and Services of External Experts are also taken. (15 Staff in department)	
13.	Number of Tree Plantation Drives organized by campus per annum. (If Any)	Yes, Three Tree Plantation Drives are Organized Annually. 608 trees and 1300 shrubs planted in this financial year.	
14.	Number of Trees Planted in Last FY.	608 (2019-2020)	
	Survival Rate	90%	
15.	Plant Distribution Program for Students and Community	Yes, Saplings are distributed to Students and visitors at various Occasions. Besides this landscape of some area in city are developed by University. <i>(photographs attached)</i>	
16	Plant Ownership Program	Various Trees are Planted and ownership programme to be in pipeline for next academic year.	

III – ENERGY

13.	List ten ways that you use energy in your institute/campus. (Electricity, LPG, firewood, others). Using this list, try to think of ways that you could use less energy every day.	Electricity saves by use of CFL/LED bulbs for illumination, LPG saves by use of Pressure cookers for cooking food. Alternate source of energy i.e. Solar panel Installed.
14.	Are there any energy saving methods employed in your institute/campus? If yes, please specify. If no, suggest some	Yes, Renewable source of energy through solar plant (1000 KW) in commissioning phase. Massages are displayed at various locations to Aware the Peoples in the premises about Energy Savings. Use of Natural Lights and Natural Ventilation are promoted.
15.	How many CFL/LED bulbs has your institute/campus installed?	95 % of Total Conventional bulbs are replaced by LED/CFL Lights.
16.	Are any alternative energy sources employed / installed in your institute? (photovoltaic cells for solar energy, windmill, energy efficient stoves, etc.) Specify.	Yes, photovoltaic cells for solar energy, energy efficient stoves and Auto switch off system in street lite near road side verges.
17.	Do you run “switch off” drills at institute/campus?	Yes, display of Informative posters nearby operational control switches in the premises.
18.	Are your computers and other equipment’s put on power-saving mode?	Yes, In Practice
19.	Does your machinery (TV, AC, Computer, weighing balance, printers, etc.) run on standby modes most of the time? If yes, how many hours?	No, Clear instructions from administrations to all academic departments for sustainable use of electronic equipment

IV – WATER CONSERVATION

20.	List four uses of water in your institute	1. Basic usage of water in campus are; Drinking, Gardening, Kitchen & Toilets, and Others. And total consumption is 1696 KL/month
21.	How does your institute store water? Are there any water saving techniques followed in your institute?	01 Overhead Water Tanks and 03 Underground Water tank installed for storage of water. Avoid overflow of water controlled valves are provided in water supply system. Close supervision for water supply system.
22.	If there is water wastage, specify why and How can the wastage be prevented / stopped?	Not any wastage, preventative maintenance of water supply system is being done by administration of campus. In case of emergency like spillage, leakage the 24 hour availability of civil team equipped with skilled technicians and machinery.
23.	Locate the point of entry of water and point of exit of waste water in your institute. Entry- Exit-	Entry- Water comes from four Submersible Pumps at campus Exit- From Water Drainage System to STP and ETP.
24.	Write down four ways that could reduce the amount of water used in your institute	Basic Four ways: 1. Close the taps after usage 2. Maintenance and monitoring of valves in supply system to avoid overflow, leakage and spillage 3. Water Conservation awareness for new students 4. Self-Closing Push Taps significantly reduce water charges in drinking water coolers.
25.	Record water use from the institute water	No, Water Meters available for calculation

	meter for six months (record at the same time of each day). At the end of the period, compile a table to show how many litres of water have been used.	of usage of total quantity only as per the per capita consumption and storage tank capacity.
26.	Does your institute/campus harvest rain water?	33 Nos of Modern rain water harvesting system are available. RWH is available on each building to conserve maximum water and recharge the ground water.
27.	Is there any water recycling System.	Yes, Full functioning Sewage Treatment Plant (STP) in the premises and Waste water parameters are being monitored as per CPCB guidelines to adopt Zero Discharge and ETP is under erection phase.

V – CLEAN AIR

28.	Are the Rooms in Campus are Well Ventilated?	Yes, Mechanical ventilation system in buildings of campus				
29.	Window Floor ratio of the Rooms	Excellent, as per NBC codes				
30.	What is the ownership of the vehicles used by your school? (Please Tick ✓ only one)	Yes				
		Operator-owned vehicles				
		✓	University-owned vehicles			
		A combination of campus-owned and operator-owned vehicles				
31.	Provide details of school-owned motorised vehicles?	Buses	Cars	Vans	Other	Total
	No. of vehicles	36	58	--	08	102
	No. of vehicles more than five years old	12	27	--	--	--
	No. of Air conditioned vehicles	--	58	--	08	102
	PUC done	Yes	Yes	Yes	Yes	Yes
32.	Specify the type of fuel used by your school's vehicles:	Total				
	Diesel	44				
	Petrol	--				
	CNG	06				
	LPG	--				
	Electric	10 (E Riksha)				
33.	Air Quality Monitoring Program (If Any)	Yes, Monitoring is being done by approved Laboratory, Report reviewed and parameters under permissible limits.				
34.	Students suffer from respiratory ailments? (If Any)	No				
35.	Details of Genset	Yes,14 Numbers of Kirlosker Silent DG Set The capacities of DG's are from 125 KVA to 1000KVA				

VI - ANIMAL WELFARE

37	List the animals (wild and domestic) found on the campus (dogs, cats, squirrels, birds, insects, etc.)	No wild animals/ stray animals in the premises. Birds and Squirrels are commonly found in campus. A variety of birds species and squirrels available but these are not harmful to human so university is doing their bid for its conservation.
36.	How many dogs in your area have undergone Animal Birth Control - Anti Rabies (ABC - AR)?	Not required
37.	Does your institute have a Biodiversity Programme or a KARUNA CLUB?	Not Available as club but campus has dedicated ECC (Environment Concern Committee) that organize biodiversity conservation awareness drive in adopted villages.


VII – ENVIRONMENTAL LEGISLATIVE COMPLIANCE

38.	Are you aware of any environmental Laws pertaining to different aspects of environmental management?	Yes, decision making team is well aware about National Environmental Laws
39.	Does your institute have any rules to protect the environment? List possible rules you could include.	Yes, No open burning of waste or residue in the premises, Less Generation of Paper waste, a fine system for the misuse of paper printing inside the campus.
40.	Dose Environmental Ambient Air Quality Monitoring conducted by the Institute/campus?	Yes, Monitoring is being done with a frequency of six months.
41.	Dose Environmental Water and Wastewater Quality monitoring conducted by the Institute?	Yes, Drinking water test reports and STP inlet and Outlet reports available.
42.	Dose stack monitoring of DG sets conducted by the Institute?	Yes half Yearly Periodicity and results of parameters under permissible limits.
43.	Is any warning notice, letter issued by state government bodies?	No
44.	Dose any Hazardous waste generated by the Institute? If yes explain its category and disposal method	Yes, Bio-medical Waste generated and disposed by BMWT facility –Synergy using the Autoclaving and Incineration technology.
45.	Dose any Bio medical waste generated by the Institute? If yes explain its category and disposal method	Yes, It is being disposed though the authorized external agency i.e. M/s Synergy Waste Management Pvt. Ltd.

VIII – GENERAL

46.	Are you aware of any environmental Laws pertaining to different aspects of environmental management?	Yes, Regulatory permission taken from State Nodal agency Like CTE, CTO and EC.
47.	Does your institute have any rules to protect the environment? List possible rules you could include.	No
48.	Does housekeeping schedule in your campus?	Yes, Swachh Bharat movement
49.	Are students and faculties aware of environmental cleanliness ways? If Yes Explain	Yes, Periodically pollution reduction, plantation, energy conservation awareness campaigns carried out by institute
50.	Dose Important Days Like World Environment Day, Earth Day, and Ozone Day etc. eminent in Campus?	Yes, World Environment Day i.e. 5 th June is celebrated by the campus. Various Essay writing, Painting Competition conducted along with plantation. Nukkar-Natak by students in locality for spreading awareness.
51.	Dose Institute participated in National and Local Environmental Protection Movement?	Yes, Swachh Bharat Abhiyan by students at campus.
52.	Dose Institute/campus has any Recognition/certification for environment friendliness?	Yes, Campus is ISO 14001: 2015 EMS Certified. (Certificate attached)
53.	Dose Institute/Campus using renewable energy?	Yes, as practically applicable
54.	Dose Institution/Campus conducts a green/environmental audit of its campus?	Yes Internally and this is first external Green audit carried out by institution.
55.	Has the institution been audited / accredited by any other agency such as NABL, NABET, TQPM, NAAC etc.?	Yes, NAAC grade 'A' in 2016

BEST PRACTICES/INITIATIVES FOR ENVIRONMENT

<p>A</p>	<p>Renewable Energy</p> <p>Solar water Heater (20 Numbers) at SVSU campus</p> <p>A clean source of energy is utilized at campus.</p> <p>Efforts towards Carbon Neutrality</p> <p>The capacity of 1000 KW Solar plant on building roofs is in commissioning phase and will be operational in a year that will supply approx. 30% of total power in campus.</p>	
<p>B</p>	<p>Biodiversity Conservation</p> <p>Flora and fauna conservation</p>	<p>It is in schedule plan of Campus Environment committee</p>
<p>C</p>	<p>Tree Plantation Drives</p> <p>Two Drives Annually as well as Every Guest is honored by Tree Plantation at Campus.</p>	<p>Yes, three plantation drives done in premises as well as in local school and villages.</p>
<p>d</p>	<p>Ground Water Recharge</p>	<p>Yes, 33 units of Rain Water Harvesting System in the premises and maintained periodically.</p>
<p>E</p>	<p>Pollution Reduction Personal Vehicles (Students) not allowed at campus</p>	<p>Reduction in Air Pollution through vehicular emission.</p>
<p>F</p>	<p>E Waste Management</p> <p>Old Computers Donated to Government School</p>	<p>All e waste is managed by SPCB Authorized recycler only as per national legislation.</p>
<p>G</p>	<p>Solid Waste Management</p>	<p>Yes, Lifting of garbage from SVSU campus on alternate day by Municipal Corporation.</p>

H	Adoption of Village CSR	Village adoption: <ul style="list-style-type: none"> • Arnawali • Satwai • Bhola • Afzalpur • Pepla
I	Water Conservation	Yes, The STP treated water used for gardening in campus.
j	Corporate Resource Center (CRC)	SVSU University Corporate Resource Center (CRC) is dedicated to nurturing future leaders

RECOMENDATIONS

- Formation of Environment Policy and communicated to all faculties and other staff.
- As per ISO 14001:2015 Certification the campus should have an Environment Management plan which includes waste management system.
- E-waste monthly inventory be maintained at campus as per E waste rules 2016.
- Water Meter should be installed at institute for monitoring of water consumption per capita.
- Increase in Environmental promotional activities for spreading awareness at campus.
- As practically feasible avoid use of personal vehicles inside the campus.
- Involve lower hierarchy staff in environmental awareness programmes and campaigns.



CONCLUSION

This audit involved extensive consultation with all the campus team, interactions with key personnel on wide range of issues related to Environmental aspects. The SVSU University has Environmental Committee for sustainable use of resources. Overall more than 60% of university campus is for landscaping. The audit has identified several observations for making the campus premise more environmental friendly. The recommendations are also mentioned with observations for university campus team to initiate actions.

The audit team opines that the overall site is maintained well from environmental perspective. There is no major observations but few things are important to initiate urgently are waste management records by monthly inventory of hazardous waste, rainwater harvesting recharge; water balance cycle and periodic inspection of buildings; environment policy and initiation of composting at campus.

REFERENCE

- The Environment [Protection] Act – 1986 (Amended 1991) & Rules-1986 (Amended 2010)
- The Petroleum Act: 1934 – The Petroleum Rules: 2002
- The Central Motor Vehicle Act: 1988 (Amended 2011) and The Central Motor Vehicle Rules:1989 (Amended in 2005)
- Energy Conservation Act 2010.
- The Water [Prevention & Control Of Pollution] Act – 1974 (Amended 1988) & the Water (Prevention & Control of Pollution) Rules – 1975
- The Air [Prevention & Control Of Pollution] Act – 1981 (Amended 1987) The Air (Prevention & Control of Pollution) Rules – 1982
- The Gas Cylinders Rules – 2016 (Replaces the Gas Cylinder Rules – 1981
- E-waste management rules 2016
- Electrical Act 2003 (Amended 2001) / Rules 1956 (Amended 2006)
- The Hazardous Waste (Management and Handling and Trans-boundary Movement) Rules, 2008 (Amended 2016)
- The Noise Pollution Regulation & Control rules, 2000 (Amended 2010)
- The Batteries (Management and Handling) rules, 2001 (Amended 2010)
- Relevant Indian Standard Code practices



ANNEXURE

PHOTOGRAPHS OF ENVIRONMENT CONSOIOUSNESS



A 'Tree Plantation' program was held at the Swami Vivekanand Subharti University, with the objective of Environment Protection. The program was held under the supervision of our University's founder Dr. Mukti Bhatnagar.

There is a huge importance of trees, such as purifying the air, act as natural resources, trees maintain the ecological balance perfectly, prevent soil erosion, used in medicines, they are habitats for many species, trees provide nutrients to the soil, etc.

Trees were planted at "Akshayavat Nursery" near the Dental Department by the efforts of Manager Horticulture – Retired District Horticulture Officer, Mr. AC Pathak.

During the drive, many plants like chrysanthemum, marigold, flax, Calendula, Dogflower, Gazinea, Dimorphic, Elizam, Dahlia, Harbin, Salvia and Ice plants, etc. were planted on grounds.

Mainly Bougainvillea in four different colours, Cannair in yellow and white colour, Eklifa in red and green colour, Duranta Golden, Dressina and Signonium plant are available.

We contribute our bit to the Go clean Go green initiative. As it is our responsibility to contribute our bit in keeping our city and campus clean and beautiful.”

Retired District Horticulture Officer Mr. AC Pathak further said, “. With a motive to let the young students learn about the importance of planting, we did a plantation drive in the University. This will remain as a lifetime memory with the scholars ”.





ECO - INNOVATION



Students of Swabhi Vivekananda Subharti University's Subharti Engineering College have teamed up with mechanical engineer Azharuddin to create a battery-powered garbage e-rickshaw that will collect garbage from the university campus without contaminating the environment. Vice Chancellor Brigadier Dr. V.P Singh flagged off the e-rickshaw outside the Shaheed Ashfaqullah Khan block. He congratulated Dr. Manoj Kapil, Principal of Engineering Colleges and Mechanical Engineer Azharuddin. He said that the use of petrol and diesel vehicles will be reduced by battery operated e-rickshaws and there will be cooperation in preventing pollution.



स्वामी विवेकानंद सुभारती विश्वविद्यालय में पर्यावरण संरक्षण के उद्देश्य से विश्वविद्यालय की संस्थापिका डा.मुक्ति भटनागर के मार्ग निर्देशन में विश्वविद्यालय के प्रबन्धक उद्यान/सेवानिवृत्त जिला उद्यान अधिकारी एसी पाठक के प्रयास से डेन्टल कॉलेज पार्किंग के निकट स्थित "अक्षयवट नर्सरी" की स्थापना की गई है।

Swami Vivekananda Subharati University has set up "Akshayavat Nursery" near Dental College Parking with the efforts of University Manager, Garden / Retired District Garden Officer AC Pathak under the guidance of Dr. Mukti Bhatnagar, the founder of the University for the purpose of environmental protection.



On the occasion of World Car Free Day, no vehicle was used in Subharti University and all the faculty members and students enjoyed walking and cycling on the open roads of the campus. Subharti University has been promoting the health and preservation of the environment since its inception. The campus is laden with beautiful trees and lush green gardens that are not only pleasing to the eye but help the environment by reducing pollution and increasing the level of oxygen. The shaded walkways within the campus aid walking by providing much-needed respite during the summer season.

It is a car-free day every Wednesday on the campus at Swami Vivekanand Subharti University, Meerut



Solar powered Street Lights with automatic on/off system



Roof top Solar Water Heater installed in the Campus to utilise the renewable energy.



Sculpture From Waste Material

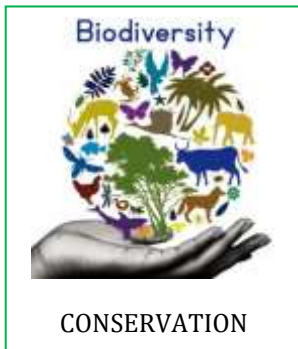




ENVIRONMENTAL
MONITORING



Environmental
Monitoring for Air
Quality Index
Parameters like SO_x,
NO_x, PM 10 & PM 2.5 by
the University



A step towards Nature conservation – Sparrow House in the campus



HERBAL GARDEN



- Y Money Plant
- Y Lemon
- Y Satavari
- Y Ashoks
- Y Eucalyptus
- Y Nagarmotha
- Y Sraggandha
- Y Gular Tree
- Y Genda
- Y Anaar
- Y Tulsi
- Y Datura
- Y Castor oil
- Y Hemp
- Y Adulsa
- Y Aloe
- Y Khatti Meethi
- Y Arjun
- Y Galoe
- Y Amla
- Y Imli Tree
- Y Allspice
- Y Tej Patta
- Y Ashwagandha
- Y Pipli
- Y Rudraksha Plant
- Y Dambuti
- Y Neem
- Y Papita
- Y Amalatas
- Y Kaner
- Y Kalabasa
- Y Haldi
- Y Camphor
- Y Bhumi Amla
- Y Patharchatta
- Y Shankhpusphi
- Y Sansevieria

ENVIRONMENTAL
AWARENESS

WORLD
ENVIRONMENT
DAY



SUBHARTI UNIVERSITY
UGC Approved Meerut
Where Education is a Passion ...
NAAC A

SUBHARTI INSTITUTE OF TECHNOLOGY AND ENGINEERING
DEPARTMENT OF ENVIRONMENTAL ENGINEERING
ORGANIZES
E-COMPETITION ON E-ESSAY AND E-POSTER
ON THE TOPIC OF
SUSTAINABLE ENVIRONMENT AND HEALTH
ON
WORLD ENVIRONMENT DAY 2020
5TH JUNE 2020
DR. MANOJ KAPIL
DR. MUKESH BUNHOLA
ER. SUPRATIM SARA

Good planets are hard to find

A cartoon illustration of the Earth as a tree. The Earth's surface is the canopy, with green leaves and a smiling face. The tree has a brown trunk and roots.

HEAL THE EARTH HEAL THE LIFE



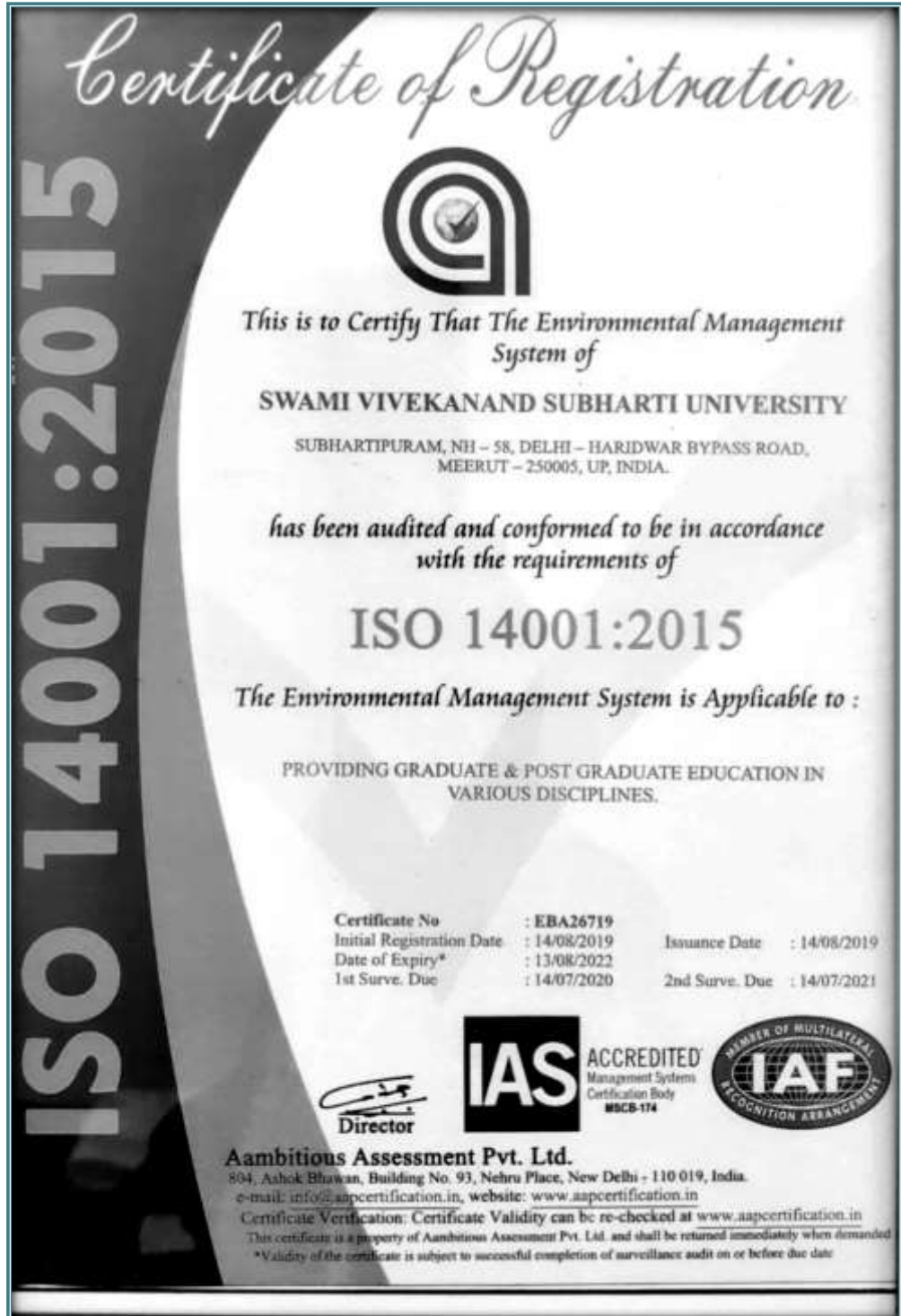
Environment posters by students – to increase awareness



ISO 14001:2015

EMS

Certification



TRANSPARENCY OF GREEN AUDIT REPORT

Green audit report is one of the useful means of demonstrating an organization/Institution's commitment to openness and transparency. If an Institute believes it has nothing to hide from its stakeholders, then it should feel confident enough to make its green audit reports freely available to those who request them. As a basic rule, green audit reports should be made available to all stakeholders.
